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CAPABILITIES OF SOVIET GENERAL PURPOSE FORCES

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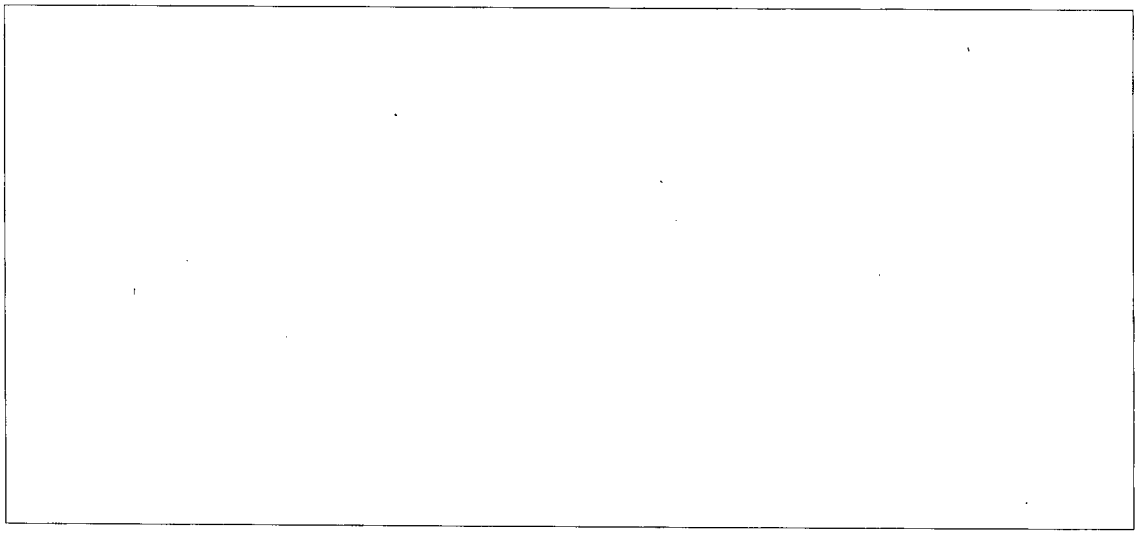

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CAPABILITIES OF SOVIET GENERAL PURPOSE FORCES

Summary

The Soviets are expanding the role of their general purpose forces. No longer tied to the single contingency of general nuclear war, the Soviet leadership is taking steps to give the forces the capability to respond over a broad spectrum of contingencies in the furtherance of Soviet foreign policy.

The army, air, and naval forces of the Soviet Union are large but poorly structured for the role being cast for them. Molded in the early 1960's as an adjunct to the missile forces in a nuclear war, the general purpose forces were given short shrift in budget deliberations. As a result, they now represent a compromise between what the military wanted and what the government granted. With the resources allowed them, the military purchased large quantities of weapons systems such as tanks, supersonic fighters, and submarines, but failed to provide the means of sustaining their forces in extended offensive operations. Ostensibly designed for attack in a general nuclear war, the Soviet general purpose forces are in fact better suited for defense in non-nuclear conflicts.

Since the early 1960's the USSR has transferred increasing responsibility to Warsaw Pact allies for the contingency of major military operations against NATO. The forces of the Eastern Europeans are being modernized. At the same time, Warsaw Pact strategy has increasingly emphasized national control. The strengthening of these forces will help to improve the Soviet ability to defend in Eastern Europe. Divergent national interests and increasing insistence on national control of forces, however, reduce the likelihood that these nations would cooperate with a Soviet initiative against Western Europe.

We believe that the Soviets, to satisfy the broader requirements of an expanded role, will make some major changes in the structure of their general purpose forces. In the Central Region facing NATO they need more ground forces service support as well as better balanced combat forces, and some readjustment along these lines will probably occur. Tactical aviation will soon receive equipment better suited to its mission.

We believe that the Soviets will undertake an expansion of the navy's traditional missions and will move to improve its capability for operations well beyond the periphery of the USSR. Some reequipping and reorganizing will be necessary if the navy is to realize this objective. The naval forces are deficient in fleet air defense, open-ocean antisubmarine warfare, and amphibious warfare. In addition, logistics support is inadequate for extensive out-of-area operations.

I. The Soviet Problem

The shape and direction of development of the Soviet general purpose forces probably will be influenced increasingly in the future by the Soviet view of three military problems - the level of combat capability needed in relation to the West, primarily in Europe; the attainment of military capabilities extending beyond the Soviet periphery; and national security requirements in the Far East.

The USSR's assessment of its requirements for general purpose forces must consider these military problem areas against a background of changing relations with the West, with China, and within the Warsaw Pact itself. Translations of these requirements into military programs rest on difficult choices and compromises among civilian and military claimants for resources, made in an environment of institutional conservatism. The Soviets have moved cautiously in reorganizing their general purpose forces and in introducing new equipment and tactics. It is likely that changes in the level and direction of effort will continue to be gradual, although Soviet concern over past military limitations will probably accelerate the development of military capabilities for conditions of less than general nuclear war.

As strategic weapons have multiplied on both sides of the Iron Curtain, the Soviet Union has come to recognize that the likelihood has diminished that either side would risk large-scale war. At the same time, Soviet interest in forces capable of asserting and defending national interests at lesser levels of conflicts has increased. A salient feature of Soviet writings on military policy over the past year has been the emphasis on this point.

Admiral Gorshkov, Commander in Chief of the Soviet Navy, declared in February 1967, for example, that the Soviet Navy must be capable of operations under both nuclear and nonnuclear conditions and

of supporting "state interests at sea in peacetime." Marshal Yakubovskiy, First Deputy Minister of Defense, stated in July of this year that there is a "wide range of circumstances" in which the ground forces may be called on to play a vital role and in which they will employ only "classical" means of warfare. This conclusion, he implied, now is embodied in official policy and will be implemented by concrete efforts to improve the capabilities of the ground forces to conduct operations "with or without employing nuclear weapons."

In assessing their military needs for the future, the Soviet leaders almost certainly hope to find new ways to translate their military power into effective political influence abroad. This will lead them to consider the development of capabilities for demonstrating a Soviet military presence in areas remote from the Soviet Union where national interests may be engaged. The ability of the United States to use its mobility and conventional strength to support Western policies in various parts of the world probably has impressed the Soviet leaders, particularly as they contrast the military mobility capabilities of the United States as demonstrated in Vietnam with their own limitations in this regard. Although the Soviet Union is continuing to enlarge its strategic attack capability with respect to that of the United States, we believe that the Soviet leaders will devote increased effort to the problem of diversifying the USSR's military capabilities to serve the range of political objectives dictated by its various commitments and interests.

II. Warsaw Pact General Purpose Forces

A. General

1. Current Status

Evidence acquired over the past year as well as reassessment of previous information

has improved our knowledge of Soviet general purpose force capabilities and has provided further understanding of trends that have affected Soviet policy in this sphere. In general, this evidence suggests that the Soviet theater forces were more deeply affected by economies imposed under the influence of Khrushchev's policies than was previously supposed. Holdings of transport and combat equipment by Soviet divisions in the Western military districts of the USSR, for example, appear to be such that the ability of these units to move rapidly or to sustain large-scale offensive operations in Europe would be degraded.

The Soviet theater force establishment was reorganized in 1960 according to principles established by the military and political leadership after lengthy deliberations. Basically, these new principles called for a highly mobile force capable of exploiting quickly the effects of massive nuclear strikes. Emphasis was placed on increasing assault capability, with some decline in the size and importance of support forces and consequent loss of conventional staying power. For example, the number of tanks and nuclear delivery weapons per man was increased, while conventional artillery and light bomber support was sharply decreased.

The Group of Soviet Forces in Germany (GSFG) and the Northern Group of Forces in Poland (NGF), both ground and air units, were reorganized and equipped to fit this new role in 1959 and 1960. The political leadership, we now believe, did not allocate sufficient resources to equip and maintain the same type and scale of force within the USSR. A compromise apparently was struck wherein the forces were reorganized along the new lines but were provided with lower levels of men and equipment than in the groups of forces (see Figure 1). For example, the tactical air armies (TAA) in the USSR lost more than 50 percent of their aircraft in 1960, and ground force units experienced a severe shortage of wheeled vehicles.

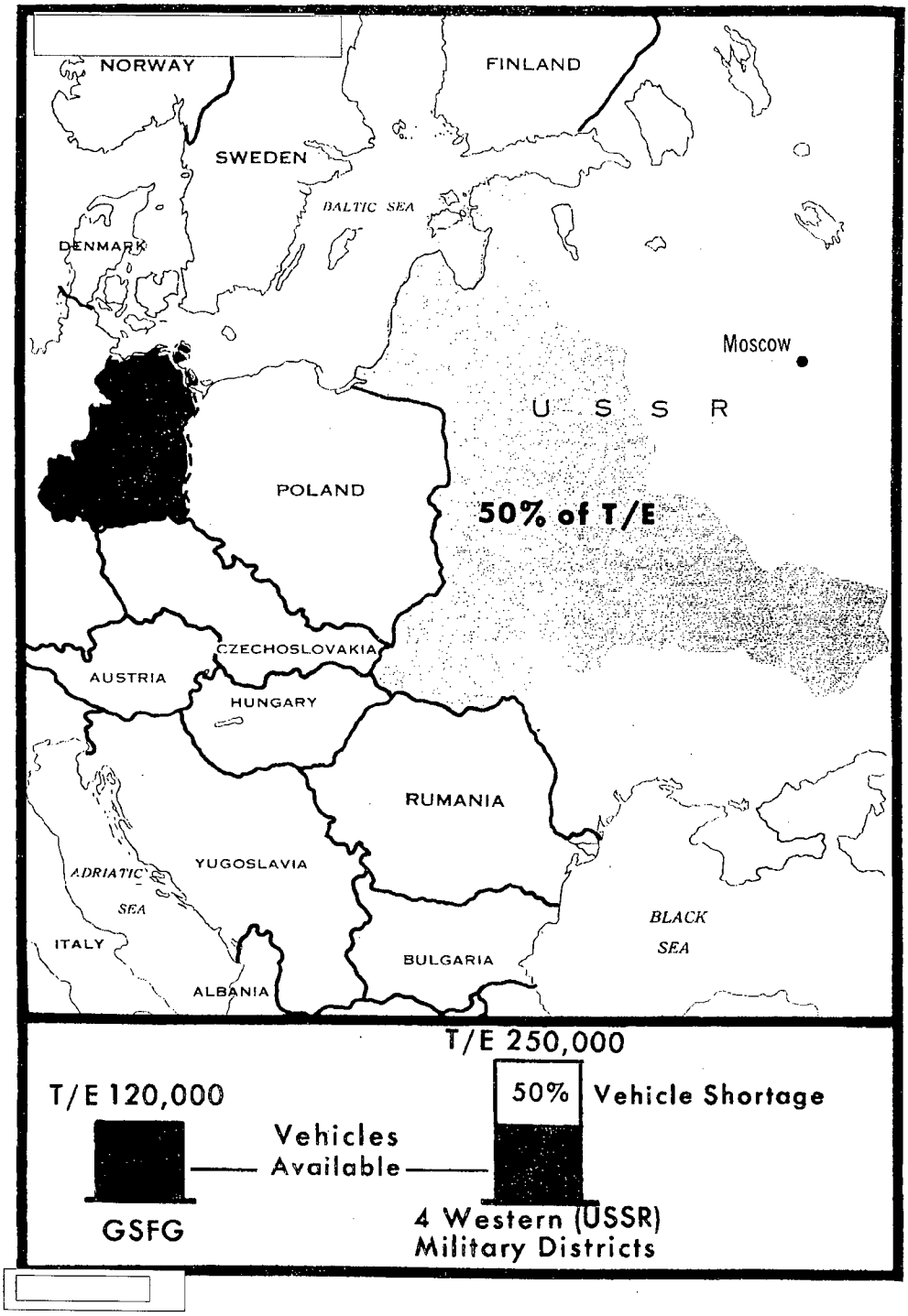
Since the early 1960's the USSR has transferred increasing responsibility to Warsaw Pact allies for the contingency of major military operations against NATO. This increased reliance has been accompanied by active measures to improve the capabilities of the non-Soviet forces - particularly those of Czechoslovakia, Poland, and East Germany - by encouraging the modernization of their equipment and by furthering their integration through joint multinational training exercises. In terms of equipment, these armies, along with the Soviet forces in East Germany and Poland, are at a higher level of readiness than any other Warsaw Pact forces. These Soviet and Eastern European forces are referred to by the Soviets as the "First Strategic Echelon" of the combined Warsaw Pact Forces, implying that they are expected to constitute virtually all of the Pact forces available in the initial stages of a war not preceded by a lengthy period of tension and buildup.

The backbone of the First Strategic Echelon is formed by the 22 combat-ready Soviet divisions in East Germany and western Poland and the six East German divisions, all of which are probably combat ready. The remainder is composed of about eight to ten Czechoslovak and as many as 11 Polish divisions. The Czechoslovak divisions are currently manned at about two-thirds wartime strength and would require about a week of mobilization to be combat ready. Even then they would have substantially lower equipment levels, and thus less mobility and sustaining power, than their GSFG counterparts. All of these forces are equipped with tactical nuclear delivery systems, but the nuclear weapons themselves remain under Soviet control.

Warsaw Pact air strength in East Germany, Poland, and Czechoslovakia consists of about 3,000 combat aircraft (1,100 Soviet and 1,900 East German, Polish, and Czechoslovak). About half of the aircraft are current models. A substantial number of the 1,500 Polish and Czechoslovak aircraft probably would be retained for air defense in their respective countries. The effectiveness

Figure 1

Soviet Ground Force Vehicles



of current Warsaw Pact tactical aircraft in an attack in depth would be restricted by their limited range and payload capacity. Moreover, they lack an all-weather ground-attack capability.

If hostilities began in the Central Region with little warning, or if the Soviets chose to launch a surprise attack without a buildup, the Pact would probably have available for offensive action only the 20 Soviet divisions in East Germany and perhaps the six East German divisions. These could probably be reinforced in a day or two by the two Soviet divisions in Poland. Providing they were able to mobilize without serious interruption, the eight to ten Czechoslovak divisions could probably be ready for offensive combat in about a week. In addition, as many as 11 Polish divisions could probably be brought up to similar capability and moved to East Germany within a week or so.

While the First Strategic Echelon constitutes a formidable defense for the Soviets, there is good evidence that they do not consider it an adequate force with which to attempt to overrun the NATO defenses and occupy Western Europe in a conventional war. For this task they evidently would expect to require substantial reinforcements from the western USSR. Although additional forces could probably be assembled in the theater of operations within a few weeks, their low equipment levels and inadequate non-divisional support would seriously limit their mobility and sustaining power. We believe that Soviet military planners would expect large increases in equipment assigned to line divisions in the western USSR and the expansion of non-divisional support prior to an initial attack on their part.

2. Future Posture

a. Soviet Union

For the next two or three years the total size and deployment of the general purpose forces are not likely to change substantially. Tensions arising from the Vietnam war and Soviet relations with China probably will result in maintaining at least the current overall strength levels.

Over the long term, the factor most likely to generate changes is a growing disposition on the part of Soviet decision-makers and military planners to act on the assumption that general nuclear war is not the most likely military contingency. They will probably seek to create general purpose forces organized, equipped, and manned in forms more adaptable to the situations and places in which Soviet power might in fact have to be brought to bear. This may also lead them to the conclusion that much of the present large, partly skeletonized ground force organization is costly in relation to its prospective combat utility.

An effective reorganization of the general purpose forces along lines better suited to current needs, however, would require wholesale elimination of outdated or unsuitable organizations. It would lead to vigorous measures to restructure the remainder at the same time that the new institutions and methods required to support a flexible modern military establishment were being developed. The traditional inertia and parochial attitudes common to the Soviet military system will militate against rapid achievement of such changes. On balance, it seems likely that the essentially static structure of the Soviet general purpose forces which has existed since 1960 will change only gradually in response to these pressures.

Some changes will come, however, and we believe that, by the mid-1970's, line divisions will be increased in size, primarily through the incorporation of more infantry and artillery. Tactical air support will be improved through the introduction of new aircraft and some redeployment. The other nondivisional combat and service support will be brought into better balance with the combat forces, providing greater readiness than at present. Some offset in the increased costs of these improvements probably will be achieved by eliminating some low-strength divisions and certain corps and armies which now are kept at low readiness levels. These changes would permit some redistribution of men and equipment to retained units. We believe that the Soviet rationale for keeping these cadre units in the force structure will give way as the contingency of general nuclear war and the concept of mass armies become less important to Soviet military planning.

At the same time that the Soviets have shown interest in broadening ground and air capabilities, it is becoming apparent that they are concerned over the structure and role of their naval forces. Soviet statements indicate that, in addition to the traditional mission of defending the homeland against attack by sea, naval forces must be able to engage in operations short of general nuclear war and will have a peacetime role in the projection of Soviet national power. Of particular significance has been the continuing rapid increase in operations outside of local sea theaters - with emphasis on submarine operations along the US routes of reinforcement to Europe - and in roles directed against the US carrier threat.

b. Eastern Europe

An increase in the capabilities of the forces of Poland, East Germany, and Czechoslovakia is also planned during the next few years. Defense expenditures in these countries will

probably increase at a rate of 4 to 5 percent per year, with the bulk of the increase going toward improving artillery strength, numbers of armored personnel carriers, and, to a lesser degree, missiles, antiaircraft artillery (AAA), and tanks. Considerable effort will probably be expended to increase the readiness and equipment of the combat support units - engineer, signal, AAA - which have been relegated to a lower level of readiness than the main combat units.

In addition to increases in equipment, the forces of these countries will probably reorganize their divisions into more balanced organizations, utilizing higher proportions of artillery and infantry than at present and approaching Western divisions in size. Over the longer term, military forces in these three countries will probably develop along lines consistent with evolving Soviet military doctrine unless there are major changes in the relationships among the Pact members.

In the remaining Eastern European countries the prospects for achievement of modern forces are slim. In spite of some desire for improvement, the present extremely low equipment levels of Hungary, Bulgaria, and Rumania suggest that these countries will not attempt to create mechanized forces comparable in quality to those of the other Pact members.

c. Warsaw Pact

Several political events of the past year suggest future problems for Warsaw Pact solidarity. West German diplomatic and economic overtures and the intra-Pact differences over the Arab-Israeli war, as well as the routine problems of defense spending, intra-Bloc trade, and resource allocation, were of particular importance. The problems raised are likely to be solvable only by compromising more of the Soviets' influence over Eastern European national prerogatives.

On the military scene the tendency continues toward the structuring of forces along national lines - that is, fronts composed of and commanded by non-Soviet Pact members. As direct Soviet military control at this level diminishes, major military-political decisions will increasingly need to consider the individual national interests of the Pact members. By permitting an increase in the effectiveness and national identity of the forces of other Pact members, the Soviets have strengthened their ability to defend Eastern Europe at little cost in Soviet resources. At the same time, however, the Soviets have reduced the likelihood that these nations would cooperate with a Soviet initiative against Western Europe.

B. Ground Forces

1. General Characteristics

The Warsaw Pact ground forces in Eastern Europe and the western USSR are currently structured in accordance with the Soviet concept of a general nuclear war with NATO. This concept subordinated other considerations to the achievement of speed and shock effect. Accordingly, they have maintained many rather small divisions which have large numbers of tanks, relatively little infantry, and a low ratio of men to equipment. Nonnuclear combat support has been minimized.

The compromises between force goals and actual achievement have resulted in considerable lack of uniformity among these ground forces, as regards personnel strength, equipment levels, and support. In turn, these differences have led to substantial variations in the corresponding levels of combat readiness.

The highest level is represented exclusively by the GSFG, which has five field armies with 20 divisions and substantial nondivisional support.* The GSFG is estimated to be combat

* Most of the indications of impending reorganization in the GSFG, which were noted in NIE 11-14-66, are no longer evident, suggesting either cancellation or postponement of whatever actions may have been planned.

ready. In addition, the two Soviet divisions in Poland may be manned and equipped at levels similar to those in the GSFG.

All of the approximately 120 other Soviet divisions, including four in Hungary, are believed to be maintained in lower readiness status and with substantially less equipment, especially wheeled vehicles. Approximately one-third of these are located in the western USSR, where they constitute the main Soviet pool of reinforcements for the GSFG. On the average, the western USSR divisions with their army-level support, and some 15 others deployed near the Chinese border, are believed to be at a medium state of readiness. The remaining 60 divisions are located in the interior of the country or in relatively unthreatened border areas and are at an even lower state of readiness. Our evidence indicates that the Soviets do not intend them as reinforcements for the Central European Theater.

The ground forces of the USSR's Eastern European allies include about 60 divisions. The forces of Czechoslovakia, East Germany, and Poland (31 to 35 divisions) are generally much better equipped than those of Bulgaria, Rumania, and Hungary but fall short of GSFG standards in levels of manning and equipment and, consequently, in combat readiness. The best Eastern European divisions, however, probably have more equipment than the Soviet divisions in the western USSR.

2. Equipment Levels

a. General

The judgments made concerning ground force equipment levels in Soviet and Eastern European units represent significant changes in current estimates and directly affect our view of the capabilities of Soviet Bloc units and our assessment of the production of military equipment. These judgments are based on analysis in depth of

reliable data on selected military units and are presented with a high level of confidence.

The equipment status of the Soviet ground forces in East Germany and in the western USSR has been reassessed, and it now is estimated that there are two general equipment levels for line divisions and ground armies. The high level is found in the GSFG and possibly in the NGF in Poland. Other Soviet ground forces have substantially lower equipment levels. No evidence of central reserves of military vehicles and equipment of the kinds required by these forces has been found, and we believe that no significant reserves exist.

b. Analytical Base

In assessing Soviet ground force equipment levels, all available high resolution photography of the military installations associated with ground forces of the Belorussian Military District, the 3rd Shock Army in East Germany, and nine additional divisions located in the western and southwestern USSR was examined. The assessment revealed that virtually all units probably have most of their tanks, although except for the 3rd Shock Army, there is little indication of the types of models. The assessment did not provide any indication of the status of armored personnel carriers,

With respect to general equipment levels other than tanks, however, the ground forces in the USSR have on the average only one-third to one-half of the equipment indicated Only two of the 21 line divisions studied inside the USSR have significantly higher levels. These two - the unidentified Guards Motorized Rifle Division in Brest and the 55th Guards Motorized Rifle Division in Grodno - have up to 75 and 85 percent, respectively. The 103rd Guards Airborne Division has about one-third of its estimated requirements.

The assessment revealed that three of the five divisions of 3rd Shock Army in East Germany probably have virtually all of the equipment listed

The equipment levels of nondivisional support units of the 3rd Shock Army are assessed at about the level indicated. For those armies inside the USSR, however, equipment levels of support units are about one-third of current estimates.

In the case of the Eastern European countries, a similar analysis made of all Czechoslovak ground force units indicated that the eight to ten ready divisions have most of the equipment covered by estimated requirements. A less detailed review of East Germany and Poland indicates that all six of the East German divisions and ten or eleven of the fifteen Polish divisions are probably comparable to the better Czechoslovak units.

c. Divisions

The divisions in the GSFG are sufficiently equipped to be committed without appreciable delay to either nuclear or nonnuclear combat. The divisions in the western USSR probably have as many tanks as those in the GSFG but have only one-third to one-half as much of other kinds of equipment, particularly trucks. If these divisions were committed to combat with their current equipment levels they would have less mobility than the GSFG divisions and probably would be incapable of sustained offensive combat at the rates of advance envisaged in Soviet tactical doctrine. They would, however, have a substantial capability for defensive combat. If the Soviets intended to employ these divisions offensively their availability for movement to a theater of operations would be subject to major delays until equipment levels could be improved by requisitioning cargo trucks from the economy. Even so, the inadequacy of Soviet civilian vehicles for general military use would leave the forces from the western USSR with seriously reduced capabilities compared with those units in GSFG.

d. Support Forces

The support forces in the ground armies of the western USSR have, on the average, about one-third as much equipment as the armies in the GSFG. This equipment level suggests that many of the support units available to the GSFG armies are not present in peacetime in other ground armies. Their absence would place even greater limits on the immediate offensive capability of the western USSR ground forces and would impose additional delays on their attainment of capabilities approaching those of GSFG.

e. Eastern European Countries

As noted, equipment levels for the northern tier - Poland, Czechoslovakia, and East Germany - are probably far higher than for Bulgaria, Rumania, and Hungary. The evidence indicates that for the northern tier the majority of the divisions are at a level between the fully equipped units of the GSFG and the lesser equipped Belorussian units, with the remainder at a level somewhat lower than those in western USSR. In addition, four of the Czechoslovak divisions are so limited in equipment or training activity that we believe they should not be considered active divisions.

3. Equipment Modernization

a. Conventional

The Soviets are continuing to introduce new armored fighting vehicles and specialized engineer vehicles at a slow, deliberate rate. The pace of truck replacement is uncertain, although the Soviets seem to have embarked on an ambitious program to place a substantial number of the relatively new, large-capacity, 8x8 trucks and prime movers into the hands of the ground forces. There has been no discernible variation in the deployment of field and antiaircraft artillery weapons since the commencement of the new 122-mm howitzer and 23-mm self-propelled AAA equipment programs.

After six years of production, the "new" T-62 tank is still found in no more than regimental strength in any division. Soviet officers have indicated that a new tank is presently under development. It is probably intended to be the combat equivalent of the new US main battle tank, the MBT-70. While there is no direct evidence as to armament, the Soviets have indicated some interest in a guided missile system. In the past new-model tanks have been produced only in sufficient quantities to partially replace older models. The complexity and expense of an MBT-70 equivalent will probably result in even more limited production of this model.

As with the T-62, introduction of the "new" BTR-60P armored personnel carrier has proceeded slowly. Large numbers of the obsolete, non-amphibious BTR-152 are still found in line divisions. This continued lack of amphibious capability prevents the sustained high-speed movement of motorized infantry visualized in Soviet military doctrine.

Czechoslovakia, Poland, and East Germany have been modernizing their forces since the early 1960's. Both Czechoslovakia and Poland are, with the exception of missile equipment, largely self-sufficient in the production of ground force armaments. In a few instances they are supplying themselves with modern equipment at a faster rate than the Soviet Union is supplying its own forces. The Czechs, for example, seem to be somewhat ahead of the GSFG in the proportion of modern APC's. East Germany, however, continues to rely on other Pact suppliers.

b. Tactical Missiles and Rockets

Soviet ground forces have tactical missile and rocket systems available at division, army, and front level. These systems can deliver nuclear, chemical, and high-explosive warheads. Most of the available warheads are likely to be either nuclear or chemical, since the lack of

pinpoint accuracy severely limits the effectiveness of high-explosive warheads. In general nuclear war these weapons would probably be supplemented by some of the medium- and intermediate-range missiles of the Strategic Rocket Forces, which initially would be directed against strategic targets of importance to theater operations and subsequently would probably be used specifically in support of such operations.

During the past year, the Frog-7 has been observed in the GSFG, where it is believed to be replacing other models. The eight-wheeled launcher with this system has better road mobility than the older tracked launcher. This increased mobility - together with a probable increase in the range of the rocket itself (to about 50 nautical miles) - should improve the Soviet capability to provide fire support to rapidly moving and dispersed forces.

Evidence on the deployment of new ballistic missile systems is not clear. We have recently obtained photography of a probable new missile in East Germany which may be the SS-12. The SS-12 would give the GSFG a missile system with a 450-nm range and the mobility required to support front operations throughout the depth of the front.

There is evidence that the Salish, a surface-to-surface cruise missile with a range of 60 to 70 nm, is deployed in East Germany. Observation of these weapons in Cuba indicates that they may be intended as chemical agent delivery systems. Employed in this role in East Germany, the Salish would have a substantial capability for attacking large area targets or for creating extended chemical barriers.

4. Ground-Based Air Defense Systems

Surface-to-air missiles (SAM's) and anti-aircraft artillery (AAA) provide point defense for critical components or locations of Soviet and Eastern European field forces. Medium- to high-altitude coverage is presently provided by the

SA-2 missile system and medium- to low-altitude capability by radar-directed AAA systems and various automatic artillery weapons of small caliber. No SAM with a low-altitude intercept capability has been identified as deployed with the ground forces. The Soviets are deploying the self-propelled, radar-directed 23-mm automatic cannon, however, and may intend it to be the principal low-altitude weapon for the next few years.

The SA-2 system is probably employed on the basis of one regiment (three battalions) per field army, although some variation has been noted. Three armies in the GSFG appear to have two regiments each, while most armies in the USSR may have only one.

There is evidence which suggests that the Ganef is entering service with the Soviet field forces. The Ganef is a ram-jet surface-to-air missile mounted on a self-propelled launcher vehicle. Although more limited in altitude, this system probably offers an improvement over the SA-2 as a tactical defensive weapon because of its improved mobility. The characteristics of the Ganef suggest that it will ultimately replace the SA-2 for tactical field use.

C. Tactical Aviation

1. Current Strength

Approximately 3,265* combat aircraft are currently operational in the Soviet tactical air forces (TAF), known as Frontal Aviation (FA). About 2,455 of these are fighter aircraft assigned to 66 fighter and ground-attack regiments. Although all TAF fighter units have both air-defense and

* An additional 3,400 fighters in the Soviet Air Force are assigned to IAPVO, the aviation element of the Home Air Defense Forces.

ground-attack missions, primary emphasis in each unit is placed on one or the other of these missions (see Figure 2). An estimated 335 light bombers are deployed with ten bomber regiments, and about 475 combat aircraft are in reconnaissance units. The distribution of operational aircraft with the tactical air forces, by type and primary role, is shown in Table 1.

In addition to the operational aircraft, some 2,500 aircraft, mostly older model fighters and light bombers, are maintained in a state of flyable storage. If needed, these aircraft could augment or replace the aircraft now in the tactical air forces.

There are 13 Tactical Air Armies (TAA's) in Soviet Frontal Aviation, the TAA being the largest operational unit in the tactical air forces. These combat aircraft remain concentrated in Eastern Europe and the western USSR. About two-thirds of the combat aircraft in Frontal Aviation are assigned to six TAA's located in East Germany, Poland, Hungary, and the Baltic, Belorussian and Carpathian Military Districts. By far the largest air army is the 24th TAA in East Germany, which has nearly 800 combat aircraft. Current deployment of combat aircraft in the tactical air forces, by Military District, is shown in Table 2.

2. Trends

The Soviets are expected to devote considerable effort over the next several years to improving the flexibility of their tactical air forces. Soviet tactical air doctrine has emphasized flexibility in the past by employing the same fighters in a variety of tasks - air defense, ground attack and interdiction, and reconnaissance. However, most of the fighters currently deployed with Frontal Aviation were designed as interceptors, and their effectiveness in the ground attack role is restricted by short range and limited payloads. In the same vein, the SU-7 Fitter, the chief ground attack fighter, has only limited utility as an interceptor because of lack of AI (airborne intercept) radar and air-to-air guided missiles.

Table 1

Operational Aircraft With Soviet Tactical Air Forces
by Type and Primary Role a/
as of 1 July 1967

Aircraft	Total	Fighter b/		Bomber	Reconnaissance
		Air Defense	Ground Attack		
MIG-17 Fresco	670	150	480		40
MIG-19 Farmer	85	85			
MIG-21 Fishbed C/E	25	25			
MIG-21 Fishbed D/F	1,230	1,170			60
YAK-28P Firebar	25	25			
SU-7 Fitter	520	25	495		
IL-28 Beagle	400			165	235
YAK-28 Brewer	170			170	
YAK-27 Mangrove	140				140
Total	3,265	1,480	975	335	475

a. Figures are rounded to nearest increment of five.
b. The fighters are broken down according to the primary emphasis of the units to assist in examining the trend of the current and future TAF re-equipment programs.

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Soviet Tactical Aviation

Figure 2

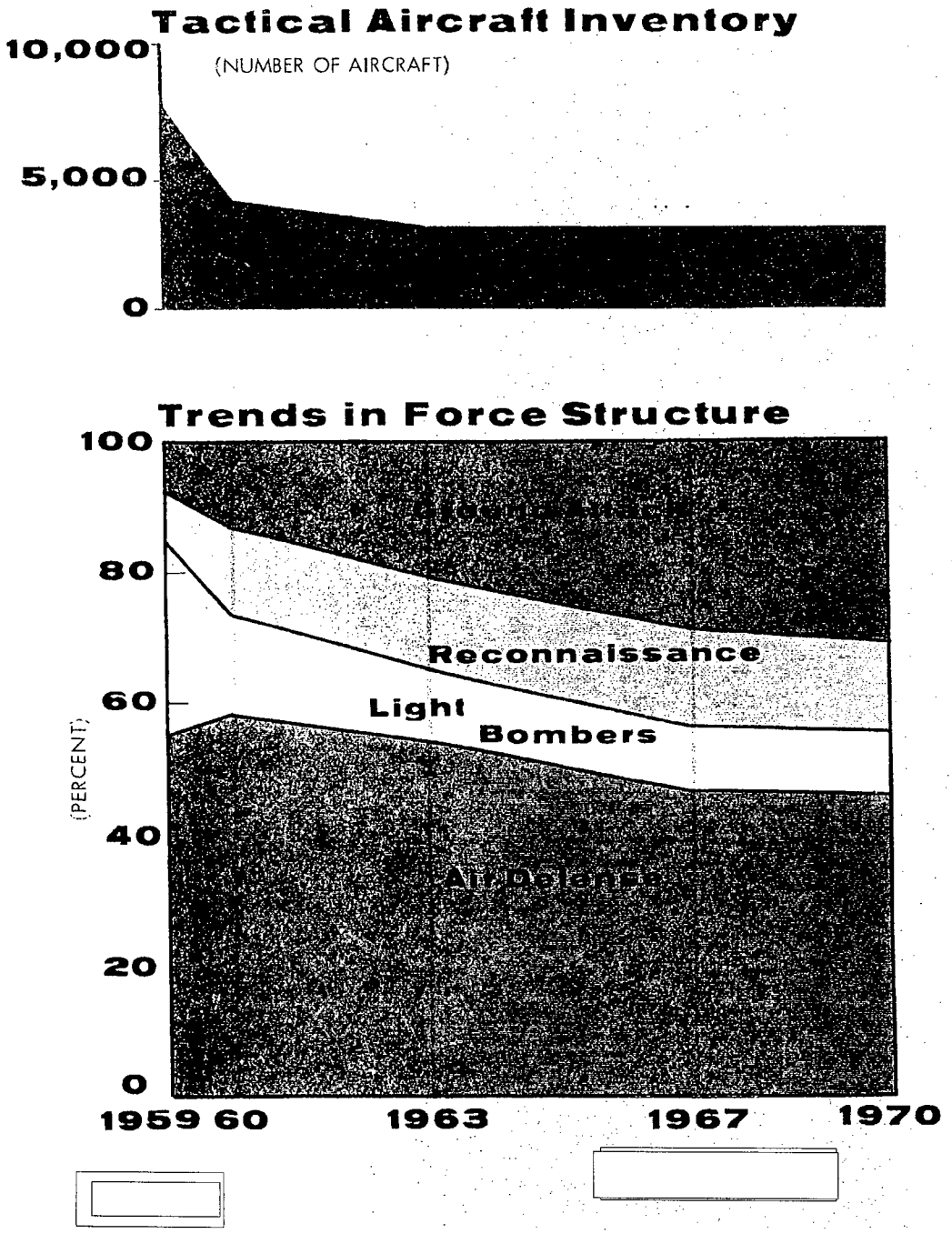

Table 2

Estimated Numbers and Deployment of Soviet Tactical Aircraft in Operational Units
by Location and Type a/
as of 1 July 1967

	MIG-17 Fresco	MIG-19 Farmer	MIG-21 Fishbed C/E	MIG-21 Fishbed D/F	YAK-28P Firebar	SU-7 Fitter	YAK-27 Mangrove	IL-28 Beagle	YAK-28 Brewer	Total
East Germany	86	12		335	25	160	12	97	74	795
Poland	84			125		37	30	10		285
Hungary	13			110		30		56		210
Baltic	62			86		12		40	32	230
Belorussia	74	12		61		74		32		255
Carpathian	74	37		110		37	32	32	32	355
Moscow	12		25	12		25	32			105
Leningrad	37					37		43		115
Kiev	37			37						74
Odessa	13	24		86		37	32	10		200
Transcaucasus				110		37		32	32	210
Turkestan	78			86				20		185
Far East	50			74		37		30		190
Trans-Baykal MD	48 b/									48
Total	670	85	25	1,230	25	520	140	400	170	3,265

a. Numbers above 100 have been rounded to the nearest increment of five. Totals are based on unrounded data. Because of rounding, the components may not add to the totals shown.
b. Some four squadrons of Fresco fighters have been deployed to the Trans-Baykal MD to support ground forces in that area near the China border. However, no unit subordination has been detected at the present.

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Deployment of a new multipurpose twin jet fighter aircraft now under development will greatly improve the flexibility of fighter operations in Soviet tactical aviation. This new Mikoyan aircraft is expected to be more effective in both the air defense and ground attack roles than current fighter aircraft.

the aircraft probably will have longer range AI radar and heavier armament than current tactical fighters, making it more effective in the air defense role. At the same time, it is estimated to have significantly greater range and payload capabilities than the current fighter-bombers.

Some restructuring of Frontal Aviation may take place beginning in 1969-70. The new twin-jet Mikoyan fighter is expected to be deployed first to ground-attack regiments to replace the MIG-17 Fresco fighters remaining in these units. However, no light bomber is known to be in production or under development in the USSR, and bomber regiments currently equipped with IL-28 Beagles may be replaced by ground attack units equipped with the new twin-jet Mikoyan aircraft. This fighter is estimated to be capable of carrying payloads comparable to the Beagle, and a fighter-bomber version of the aircraft could be equipped with some type of bomb/navigation type of radar. Because of its greater capabilities in air defense, ground attack, and bombing, some of the ground-attack regiments receiving this aircraft may become general purpose tactical fighter units.

The Soviets are expected to continue to develop new aircraft for service with the tactical air forces in an effort to improve overall capabilities and flexibility. A new tactical fighter, probably equipped with variable-geometry wings, is expected to enter operational service in the 1971-73 period. In addition, significant efforts are being devoted to development of vertical or short take-off and landing capabilities in fighter aircraft.

It is believed that the Soviets view the problem of preparing for a nonnuclear war contingency as, in part, one of improving the flexibility of

their tactical air forces rather than increasing the size. As in the past, large numbers of older model tactical aircraft will probably be kept in a state of flyable storage as a hedge against other contingencies.

The overall force level of Soviet tactical aviation will decline in the 1970's. The new aircraft will be more complex and costly to produce, and will not be required in the same numbers to perform the same missions as the older aircraft. As a result the number of aircraft per unit is expected to decline.

3. Production and Re-equipment Programs

Re-equipment of Soviet tactical air forces with current generation aircraft has continued during the past year. Older model MIG-15 Fagot, MIG-17 Fresco, and MIG-19 Farmer fighters have been replaced by MIG-21 Fishbed D/F interceptors and SU-7 Fitter fighter-bombers on a one-for-one basis. YAK-28 Brewer light jet bombers have replaced Il-28 Beagles in five of the ten bomber regiments. However, recent evidence indicates that these current aircraft re-equipment programs are nearing completion.

Most of those fighter regiments in Frontal Aviation which emphasize air defense are now fully equipped with Fishbed D/F all-weather interceptors (see Table 1). Re-equipment is under way in four other units, which are likely to be fully equipped with the aircraft in the next few months. Some of the remaining six regiments, most of which have special functions, are equipped with other current generation fighters. Fishbed D/F interceptors recently have been delivered to reconnaissance units, and it is unlikely that such units would receive these aircraft until planned re-equipment of fighter regiments was nearly completed.

Fishbed D/F interceptors are produced at two facilities in the USSR - Gor'kiy Airframe Plant 21 and Moscow Airframe Plant 30. Plant 21 is the primary production site for interceptors of this type deliverd to the Soviet tactical air forces. Since production of the all-weather Fishbed D was initiated in 1962, over 1,800 of the interceptors have been produced at this facility. It is estimated that by late 1967 the total number of Fishbed D/F produced at Plant 21 will be sufficient to meet the requirements of Frontal Aviation, including the aircraft needed to maintain replacement levels. A new Mikoyan-designed tactical fighter is believed to be ready to enter series production at Plant 21 and the Fishbed probably will be phased out of production in late 1967 or early 1968. By then total production of the Fishbed D/F interceptors for the tactical air forces will have reached some 1,900 aircraft.

The SU-7 Fitter re-equipment program also is believed nearing completion. More than half of the Frontal Aviation ground attack regiments are at least partially equipped with these fighter bombers. It is unlikely that all ground attack regiments will be re-equipped with Fitters, since the new Mikoyan tactical aircraft has greater speed, range, and payload capabilities and is believed to be ready for series production. Most Fitter aircraft delivered to Frontal Aviation during the next year probably will be to fill out those regiments already partially equipped, although at least one more regiment may receive these aircraft.

Fitter fighter-bombers are produced only at Komsomol'sk Airframe Plant 126. Over 1,200 of these aircraft have been produced as of mid-1967. Since the last estimate, Fitter aircraft have been exported for the first time to non-Communist countries. With the deployment of Fitters to Soviet ground attack regiments nearing completion, continued production of these fighter-bombers beyond the end of 1967 will depend primarily on export commitments.

Five bomber regiments now are fully equipped with the YAK-28 Brewer light jet bomber, and it is likely that this represents peak deployment of this aircraft. All of the earlier Brewer A bombers are believed to have been replaced in operational units by the later Brewer B and C variants. Total production of all variants of the Brewer, including trainers, is estimated to be some 370 aircraft.

The Brewer bomber probably was phased out of production at Irkutsk Airframe Plant 39 by late 1966. Since late 1965, all Brewer deliveries have been to regiments already at least partially equipped with these aircraft, and deliveries of Brewer since mid-1966 have been negligible.

4. Equipment Modernization

It is estimated that Soviet Frontal Aviation will maintain about the present force level through mid-1969. During this period, Fishbed and Fitter re-equipment programs will be completed, and a new tactical aircraft is expected to enter operational service. Estimated numbers of Soviet tactical aircraft in operational units through mid-1969, by model, are shown in Table 3.

The assignment of MIG-21 Fishbed D/F aircraft to reconnaissance units in the tactical air forces will probably continue during the next two years. The current pattern of deployment suggests that MIG-17 Fresco fighters now with reconnaissance units may be completely replaced by Fishbeds in the near future.

Fishbed interceptors have replaced Frescos in three of the five Fresco-equipped reconnaissance units, and recent evidence suggests that one other Fresco-equipped reconnaissance unit is currently converting to Fishbeds. There is no evidence that Fishbeds are replacing Il-28 Beagles in reconnaissance units, although this also is possible.

Table 3

Estimated Numbers of Soviet Tactical Aircraft
in Operational Units by Model a/
1 July 1967 - Mid-1969

	1 July 1967	Mid-1968	Mid-1969
Old Models	1,155	1,075 to 850	925 to 750
MIG-17 Fresco	670	625 to 525	550 to 450
MIG-19 Farmer	85	50 to 0	25 to 0
IL-28 Beagle	400	400 to 325	350 to 300
Current Models	2,110	2,150 to 2,425	2,200 to 2,525
MIG-21 Fishbed C/E	25	0	0
MIG-21 Fishbed D/F	1,230	1,300 to 1,400	1,350 to 1,475
YAK-28P Firebar	25	25 to 50	25 to 50
SU-7 Fitter	520	550 to 625	550 to 650
YAK-27 Mangrove	140	125 to 150	125 to 150
YAK-28 Brewer	170	150 to 200	150 to 200
Future Models	0	0	0 to 25
TF-68	0	0	0 to 25
Total	3,265	3,225 to 3,275	3,125 to 3,300

a. Figures are rounded to the nearest increment of five.

Reconnaissance units in Soviet tactical aviation have always had secondary missions of air defense and ground attack. In addition to the normal reconnaissance functions, Soviet tactical air doctrine has emphasized a concept of armed reconnaissance. The main stress in this concept is the attacking of targets of opportunity, especially locating and attacking enemy reserves and mobile targets in the enemy rear which photographic intelligence failed to reveal. The equipping of reconnaissance elements with late-model combat aircraft indicates continuing emphasis on this armed reconnaissance concept.

For example, the reconnaissance regiment at Altenburg engaged in ground attack and intercept training immediately after being equipped with Fishbed fighters.

A new multipurpose fighter aircraft may enter operational service with Frontal Aviation in late 1968 or early 1969. The most likely candidate for deployment in this role is the twin-jet Mikoyan-designed fighter exhibited in the Moscow Air Show in July. This aircraft was described by the Soviets as suitable for deployment as an interceptor, a fighter-bomber, and a reconnaissance aircraft, indicating that it is designed as a multipurpose fighter.

It is believed that the twin-jet Mikoyan fighter could enter series production as early as late 1967 or during 1968. Testing of the aircraft was initiated in early 1964, however, and the most recent fighters to enter production have been tested about five years before production was initiated. The apparent complexity of the new Mikoyan fighter suggests that it will also require extensive testing before it enters production. KEYHOLE photography in August 1966 revealed the presence of the aircraft at the Vladimirovka Weapons Test Center, indicating that the aircraft was engaged in weapons system testing by that time. At least five of these fighters have been built for developmental testing, indicating an extensive

test program and an intent to deploy the aircraft operationally. The probable production facility for the twin-jet Mikoyan fighter is Gor'kiy Airframe Plant 21, presently a site of the Fishbed D/F.

5. Air Defense

Soviet air defense for the ground forces is, in spite of SAM and AAA deployment, dependent mainly on the capabilities of tactical aviation. The Soviets have continued to improve the air defense capabilities of tactical aviation. Approximately half of the fighters, nearly all of those in units with a primary responsibility of air defense, are MIG 21 Fishbed D/F all-weather interceptors capable of speeds greater than Mach 2.0. As an interceptor this fighter is armed with either Atoll (AA-2) infrared homing air-to-air missiles (AAM's), or Alkalai (AA-1) radar beam riding missiles. The Atoll AAM is similar to the US Sidewinder missile and is particularly effective at higher altitudes and in clear-air-mass situations. The Alkalai, although an older missile with a relatively short range, gives the Fishbed weapons system a true all-weather capability. In an air defense role most other fighters in Soviet tactical air would be limited to daylight attacks with guns and rockets.

Soviet air defenses remain vulnerable to attacks at low altitudes, especially at night or under conditions of poor visibility. With the exception of the YAK-28P Firebar, Soviet fighters at altitudes below 3,000 feet are limited to visual attacks. The Firebar, the primary Soviet low-altitude interceptor, can perform effective all-weather intercepts at altitudes down to about 1,000 feet. However, only two squadrons of Firebars are deployed currently with Frontal Aviation. Since the aircraft has been phased out of production, there will probably not be any increase in the number deployed with tactical air units.

The limited fuel capacity of Soviet interceptors restricts the time that these aircraft can remain on station in air defense missions. The Soviets have concentrated on developing light, highly maneuverable fighters with relatively simple airborne avionics heavily dependent on ground-controlled intercept. The aircraft are designed to be able to operate from sod airstrips.

6. Eastern European Air Forces

Acquisitions of current-generation fighter aircraft by Eastern European Communist countries have increased sharply since mid-1966. Approximately 190 fighters have been delivered to these countries during the past year, some 170 of which have been MIG-21 Fishbed D/F all-weather interceptors. East Germany in particular has received more than 100 Fishbed D/F aircraft since mid-1966, raising to 200 the number of these fighters in the East German Air Force. Both Czechoslovakia and Poland also are receiving MIG-21's and it is expected that the aircraft will continue to enter these forces for the next two years. Tactical aircraft in the air forces of the Eastern European Communist countries, by country and model, are shown in Tables 4 and 5.

As yet many of the newly delivered MIG-21's cannot be located at specific airfields However, for estimative purposes these new fighters are considered part of the total inventory, although they may not be operational at the present time.

Fishbed D/F aircraft delivered to the non-Soviet Warsaw Pact air forces are produced at Moscow Airframe Plant 30. Nearly 1,100 of these all-weather interceptors have been produced there. Fighters turned out by this facility are also exported to non-Communist countries and to non-Warsaw Pact Communist countries. Continued production of the aircraft at Plant 30 will, therefore, be influenced by export commitments as well as by the Eastern European needs. None of the fighters currently being delivered to the non-Soviet Warsaw Pact air forces is produced outside the USSR.

Table 4

Combat Aircraft in Eastern European Air Forces a/
as of 1 July 1967

Country	MIG-15 MIG-17 Fagot/Fresco	MIG-19 Farmer	SU-7 Fitter b/	MIG-21 Fishbed b/ C/E	MIG-21 Fishbed b/ D/F	Il-28 Beagle	Total
Bulgaria	195	70	0	10	25	10	310
Czechoslovakia	230	100	80	60	90	25	585
East Germany	110	25	0	70	200	0	405
Hungary	30	10	0	60	30	0	130
Poland	675	20	15	35	95	60	900
Rumania	150	20	0	40	10	10	230
Total	1,390	245	95	275	450	105	2,560

a. Figures are rounded to the nearest increment of five.
b. Numbers represent aircraft delivered.

Table 5

Combat Aircraft in the Eastern European Air Forces a/
1 July 1967 - Mid-1969

Aircraft	1 July 1967	Mid-1968	Mid-1969
MIG-15 Fagot/MIG-17 Fresco	1,390	1,230 to 1,320	1,100 to 1,200
MIG-19 Farmer	245	200 to 245	150 to 225
MIG 21 Fishbed C/E	275	275 to 300	275 to 300
MIG 21 Fishbed D/F	450	450 to 500	500 to 600
SU-7 Fitter	95	100 to 125	125 to 150
Il-28 Beagle	105	90 to 100	85 to 95
Total	2,560	2,345 to 2,590	2,235 to 2,570

a. Figures are rounded to the nearest increment of five.

Increased deliveries of Fishbed D/F interceptors to the Eastern European members of the Warsaw Pact clearly indicate a continuing emphasis on air defense. Each of these six has its own air defense system command although all are part of the Warsaw Pact air defense system which is coordinated by the Soviet air defense system (PVO), with headquarters in Moscow. Air situation reports are exchanged between Eastern European air defense commands.

During the year there has been increased cooperation between the Eastern Europeans and the USSR in air defense. This is particularly true of Czechoslovakia, Poland, and East Germany. All three have received some of the best radar in the Soviet inventory and semiautomatic data transmission equipment for vectoring fighter aircraft against targets. This, with the increased inventory of all-weather fighters, has significantly increased the air defense capabilities of these forces.

There has been some increased emphasis on the ground attack mission of Eastern European air forces in the past year, particularly in Czechoslovakia, East Germany, and Poland. While most fighter units are trained to perform ground attack missions, only a few of the aircraft are well adapted to such a role. Czechoslovakia and Poland are the only two countries which have received the Soviet-made SU-7 Fitter, the current Soviet ground attack aircraft. Deliveries of this aircraft to Eastern Europe have been much slower than was previously estimated. In addition to Czechoslovakia and Poland, East Germany may receive some Fitters during the next two years.

Bulgaria and Rumania have received almost no new aircraft in the last year. Their forces have only a marginal all-weather capability and unless they receive more current model fighters will be restricted to a clear air intercept role, plus a small ground attack capability.

Poland has become the first Eastern European country to receive AN-12 Cub turboprop transports. Two of these assault transports were received by Poland in the past year. Airlift, however, still must be provided by Soviet units since Eastern European capabilities are minimal.

The air training in all of Eastern Europe is determined by the doctrine and policies of the USSR. Premilitary training takes place in civilian aeroclubs under strict control of the air forces. Sufficient personnel are being trained to meet current air force requirements. Standards of flight training are low in comparison with those of the United States and some other Western countries. Major deficiencies include, until recently, little all-weather training and a low number of flying hours - about ten hours per month except in Rumania where it is only about six to eight hours per month, as compared with 20 to 25 hours for USAF pilots. More all-weather flying now is taking place in Czechoslovakia, East Germany, and Poland, where most of the MIG-21 Fishbed D aircraft have been delivered.

Eastern European maintenance practices are based on the system used in the USSR. Except for Poland and Czechoslovakia, the Eastern European Communist countries are completely dependent on the USSR for aircraft, engines, spare parts, and logistical support. Czechoslovakia and Poland can supply parts and repairs on their older aircraft but depend on the USSR for the newer aircraft. The most serious deficiency of the East German maintenance system is the absence of a jet aircraft overhaul capability. Such work is done in Soviet repair depots.

7. Tactical Airlift Support to Soviet Ground Forces

Some 170 light transports* and 150 heavy and 500 light helicopters are deployed in varying

* There are also some 40 AN-8 Camp medium transports assigned to the Soviet 24th TAA in East Germany, but these are arbitrarily carried under VTA-Abn (Military Transport Aviation/Airborne).

numbers with the Soviet tactical air forces in most military districts. These are used to satisfy logistics support and ancillary requirements of the air army or air force to which they are assigned and of the ground force components in their area of responsibility. Helicopter units satisfy most requirements for short-range tactical airborne support since they are particularly well suited for the placement of small troop elements and equipment in key areas and for resupply. However, the strength and disposition of the transport and helicopter units preclude their use for the massive lift of large ground units.

Most helicopter units are equipped with the MI-4 Hound, a versatile helicopter capable of carrying some 16 troops or 2,600 pounds of cargo to a radius of about 125 nm. Bulk loads, such as a GAZ-69 truck or an antitank gun, can be loaded through clamshell doors in the rear fuselage. The Hound now is out of production and it is believed that some helicopter units are beginning to receive a turbine-powered follow-up, the MI-8 Hip, which has a considerably greater carrying capacity.

Short-range lift of heavy equipment in tactical operations is provided to a considerable degree by the MI-6 Hook. This giant helicopter can carry a normal load of over 13,000 pounds to a radius of 160 nm. With its loading capability, available cabin space, and rear-ramp loading feature, the Hook can carry many loads of varying types including tracked vehicles, trucks, and field guns. It can also carry external loads by cable.

The MI-10 Harke, a flying crane derivative of the Hook, now is in service with at least one unit. This helicopter can lift over twice the basic load of the Hook, but to shorter distances. One version has a stiltlike landing gear which enables it to straddle and carry considerably larger vehicles than Hook can carry. Another version has an underslung supplementary cockpit which facilitates loading and maneuvering with external loads suspended from a cable. Both the Hook and the Harke are in series production.

Soviet airlift capabilities would be improved if a wider range of helicopters in the light to medium category were available.* Such helicopters have been developed although their production status is unclear. The KA-25K Hormone small flying-crane-type helicopter could serve a number of tactical applications, both for logistics support and the movement of small contingents of personnel. Other helicopters which could play some airlift role include the MI-2 Hoplite and the KA-26 Hoodlum.

Most of the light transports assigned to Tactical Aviation are piston-engine LI-2 Cabs and IL-14 Crates. This force probably will be upgraded with the assignment of an increasing number of AN-24 Coke twin-turboprop transport aircraft. The latest version, which can carry cargo and passengers and has a small rear-loading door, is particularly well suited for a number of military roles. AN-14 Clod transports are being assigned in increasing numbers, but their size limits them mainly to utility and liaison functions.

D. Military Transport Aviation

1. General

Military Transport Aviation (VTA), one of the basic arms of the Soviet Air Forces (VVS), coordinates all military transport activity and furnishes airlift support to all Soviet military forces. The largest element of VTA is VTA-Airborne, which serves the Airborne Forces and is also used to meet a variety of airlift needs for other military forces and the government through special task missions. Normal internal support requirements of general purpose organizations are met by aircraft which have been allocated to these organizations by VTA.

* Hound and Hip are usually categorized as light helicopters. However, they are more accurately described as mediums in view of their gross weights and lift capabilities.

A limited number of VTA transports are assigned to General Purpose Transport Units (GPTU) at Moscow and Khabarovsk. The units support diverse functions, including VIP movements. These aircraft, along with Aeroflot - the civil air fleet - would augment VTA in moving men and equipment if the need arose.

2. Airborne Assault Capability

VTA-Abn consists of some 700 aircraft, over 600 of which are AN-12 Cub medium transports. Little or no increase in the medium transport force is expected since the Cub is out of production and there is no indication that a military follow-on to the Cub is available or under development. Now that the Cub strength is reaching a peak, emphasis is shifting from medium to heavy transports.

The AN-22 Cock now is in series production and is expected to enter operational service in early 1968. Based on the estimated rate of production of the AN-22, as many as 15 could be in military service by late 1969. The assignment of the AN-22 will permit the airdrop of all equipment organic to an airborne division and the airlanding of heavy equipment such as that assigned to a motorized rifle division. The large cargo compartment of the AN-22 also makes it an ideal transporter of missiles and space system components.

VTA-Abn consists of 20 medium transport regiments. All are deployed in the western USSR except one regiment in the border area of the Turkestan Military District, two in the border area of the Far East MD, and one in East Germany.*

* The regiment of AN-8 Camp aircraft in East Germany is subordinate to Soviet Tactical Aviation, but is arbitrarily carried under VTA-Abn in view of its lift capabilities.

In view of Soviet efforts to update the airlift forces and the increasing importance of Far Eastern border areas, it is believed that at least a few AN-12 Cubs now may augment transport forces in the Far East. AN-22's probably will be based in the western USSR initially. Their entry into service will permit the transfer of some Cubs to areas of increasing operational importance, if the Soviets so elect.

The approximately 600 AN-12 Cubs of VTA-Abn are able to lift the assault elements of one airborne division and one regiment (about 8,000 men with supporting equipment) to a radius of about 760 nm or a range of 1,200 nm.* If all of the AN-12's are new or modified versions, the same assault elements could operate against targets to a radius of up to 1,150 nm or a range of 1,760 nm.** In an emergency this capability could be augmented by other aircraft in VTA and civil aviation. Airlift to such distances permits operations against many important areas in Eurasia, particularly when operating from forward bases in East Germany and the Balkans, but not against objectives in distant areas.

Range and payload limitations of the AN-12 emphasize the importance of the carrying capacity of the AN-22 Cock, which on a basic mission*** can carry up to 99,000 pounds to a radius of up to 2,820 nm or a range of 5,100 nm. This range covers most areas of the northern hemisphere. AN-22's demonstrated their capability and versatility at the 1967 Moscow Air Show by landing tactical surface-to-surface and air-to-surface missiles with their carriers.

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* Radius and range based on the capability of the first version of the AN-12 with 60 paratroops. The lift of these assault elements to such distances could be made if, for example, the AN-12 force consisted of 132 AN-12's for the transport of personnel, and 88 AN-12's and AN-12A's, 150 AN-12B's, and 150 modified AN-12A's and AN-12B's for the transport of equipment. (Footnotes follow on p. 37.)

E. Naval Theater Forces

1. Mission

The Soviets are expanding the mission of the Navy. According to Admiral Gorshkov, "This means a fleet which, in composition and armament, is capable of carrying out missions assigned it, not only in a nuclear war, but in a war which does not make use of nuclear weapons and is also able to support state interests at sea in peacetime." Other Soviet officials have also indicated recognition of the need to develop forces designed to provide strategic defense of the USSR against attack from the sea, to engage in limited naval operations short of general war under nonnuclear as well as nuclear conditions, and to project Soviet national power in peacetime. The emerging mission of the Soviet Navy is broader than at any time in its history. Recent manifestations of Soviet naval policy include the expansion of out-of-area operations and the use of auxiliaries for logistic support in distant waters for extensive periods of time.

While the Soviets may wish to provide naval support to countries such as North Vietnam and the Arab countries in the eastern Mediterranean, they recognize that, at present, their naval forces are inadequate to these tasks in the face of Western naval opposition. This inadequacy stems not only from lack of operational experience but from the basic composition of the Soviet naval force.

There are strong indications that one of the principal concerns among the military leadership is the impressive use of aircraft carriers by

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** The aircraft can operate to considerably greater distances with reduced payloads. The modified AN-12B, for example, has an estimated combat range of 4,230 nm with a payload of 10,635 pounds.

*** Accomplished at maximum takeoff weight with full internal fuel and the remainder of the usable load in payload.

Western powers in limited war situations such as Korea, Suez, Lebanon, and now Vietnam. The presence of the Sixth Fleet in the Mediterranean apparently is viewed not only as a strategic threat to the USSR, but as a serious obstacle to its foreign policy goals in the area. There is also an indication that some Soviet naval leaders would endorse a change in policy to include a program of aircraft carriers. But construction of a significant carrier force would involve major new investments and reverse longstanding Soviet opposition to such a program.

Because of the problems involved, Soviet leaders are seeking alternate means to develop a naval force capable of providing military support in limited war situations. Therefore, we believe that significant changes will be made within the naval general purpose forces over the next ten years, some elements of which are already becoming apparent.

2. Operations

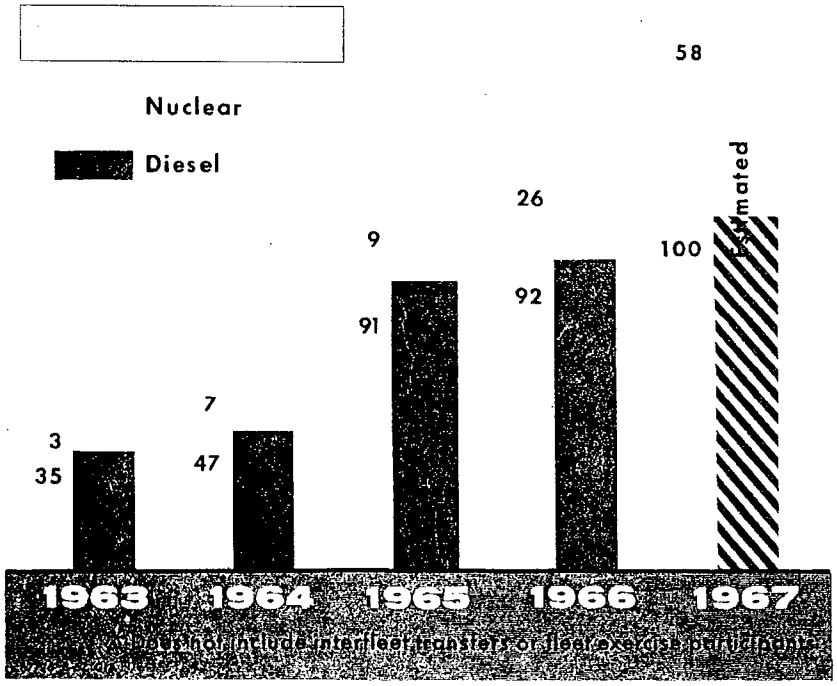
The most significant aspect in the development of Soviet naval capability is the continuing increase in operations outside of local sea theaters. In the past year these out-of-area operations have approached both US coasts and as far south as the equator in the Atlantic Ocean. Major emphasis continues to be given to submarine out-of-area operations (see Figure 3). It is considered noteworthy that the number of submarine deployments rose from 44 in the first half of 1966 to about 90 in a similar period in 1967. Soviet naval out-of-area activity has also included the deployment of major surface ships (both combatants and auxiliaries) and the employment of intelligence collector units and hydrographic survey ships in distant waters.

The primary task of the nuclear-powered E-class cruise missile submarines apparently is to counter US attack carrier task forces. The deployment of E-class submarines over the past few years

Figure 3

Soviet Submarine Out-of-Area Patrols*

All Fleet Areas 1963-1967



*Does not include interfleet transfers or fleet exercise participants

seems to establish this as their primary function; moreover, we believe that the E-class submarines are not now intended for attack against coastal installations. E-class submarines have been deployed to the central North Atlantic to patrol zones that cut across great circle routes between US and continental Europe and have participated in strategic defense perimeter exercises such as those conducted in the Norwegian Sea in August 1966 and May 1967. The J-class diesel-powered cruise missile submarines, which are just now coming into active service, were also observed. We believe that this class will eventually relieve the E-class in the perimeter defense role.

The absence of W-conversion (Twin-cylinder and Long-Bin) cruise missile submarines that they are in reserve status and we believe that they may be phased out of service within the next decade.

In the Norwegian Sea exercises, reconnaissance against Soviet surface units simulating an attack was conducted by TU-16 Badger and TU-95 Bear aircraft. The absence of major Soviet naval surface units from the defensive forces leads us to conclude that they will not be employed in a tactical defensive role in the open sea.

Since April 1967 the Soviets have been operating a task force in the South Atlantic southwest of the Cape Verde Islands, several thousand miles from its fleet headquarters in Severomorsk. The force has consisted of E, N, and F class submarines, submarine tenders, a cruise missile support ship, and a small oiler. We believe the main objective is to gain experience in mobile logistic support for submarines in areas remote from home bases.

During the past year the USSR has maintained an almost continuous surveillance by submarines and AGI's (intelligence collector ships) of the US Polaris submarine bases at Holy Loch, Rota, Guam, and Charleston. An ambitious program continues in hydrographic survey operations. These operations appear to be designed for the collection of data for bottom contour mapping and gravimetric measurements, both of which are important in submarine navigation, particularly in future fleet ballistic missile submarine operations.

The Soviets, during the past year, have continued to deploy AGI's and nuclear submarines in long-range sorties into the far reaches of the Atlantic and Pacific oceans. These operations are probably probes designed to test US detection capabilities and to collect intelligence.

By far most of the operations conducted by the Soviet Navy have been carried out by the Soviet western fleets (the Northern, Baltic, and Black Sea fleets). Although our knowledge of Soviet Pacific Fleet submarine operations is somewhat sketchy, we believe that the objectives of these operations are similar to those in the Atlantic.

3. Force Developments

a. Antisubmarine Warfare Capability

During the past year the Soviets have failed to demonstrate any significant advance in their antisubmarine warfare (ASW) capabilities in the open ocean. In the Mediterranean Sea, where the Soviets have deployed a large force of submarines and major surface ships, there have been no identifiable antisubmarine operations, although exercises in submarine detection probably have been conducted. We do not anticipate any major improvement in Soviet capability for submarine detection in the open ocean during the next few years. However, some improvement could be achieved earlier if the May ASW aircraft - a variant of the IL-18 Coot - were brought into series production. This aircraft is land based and is capable of performing long-range antisubmarine patrols.

We believe that the vehicle which would provide the most significant advance in the Soviet ASW program would be a high-speed, quiet-running, nuclear-powered attack submarine. The nuclear-powered attack submarines under construction at the Gor'kiy Shipyard may represent a significant advance in the development of this capability. For some time the MI-4 Hound helicopter has been used in ASW operations in local sea theaters. It is possible that within the next year a helicopter carrier may be deployed in an ASW role. A version of the KA-20 Harp/KA-25 Hormone could be deployed aboard in a search and destroy role.

With respect to Soviet capabilities in local sea theaters, we believe their ASW effectiveness to be relatively good. In these areas airplanes, helicopters, surface ships, and submarines can all be brought to bear in a co-ordinated effort. The effectiveness of the ASW forces sharply decreases, however, beyond a few hundred miles from shore.

In the field of hydroacoustics the Soviets continue to emphasize the development of sonobuoys. There is tenuous evidence of the use of explosive echo-ranging in hydroacoustic experiments. The Soviets are apparently developing an advanced submarine-mounted sonar, although it is still in the experimental stage. Similarly an experimental variable depth sonar (VDS) has been observed on a Petya class escort. A major development which has now reached an operational stage is a vastly improved passive submarine sonar array. This is the result of several years of observed experimentation with modified Z-class attack submarines. The new classes of nuclear submarines now under construction are believed to incorporate the advances achieved from the Z-class experimental program.

b. Soviet Naval Infantry

during the past year the development of naval infantry forces continues to be emphasized and that their operational role has been broadened. In addition to the mission of securing beachheads and operating in advance of regular Soviet ground forces, it appears that naval infantry has assumed a significant role in the operations of the Soviet Mediterranean fleet.

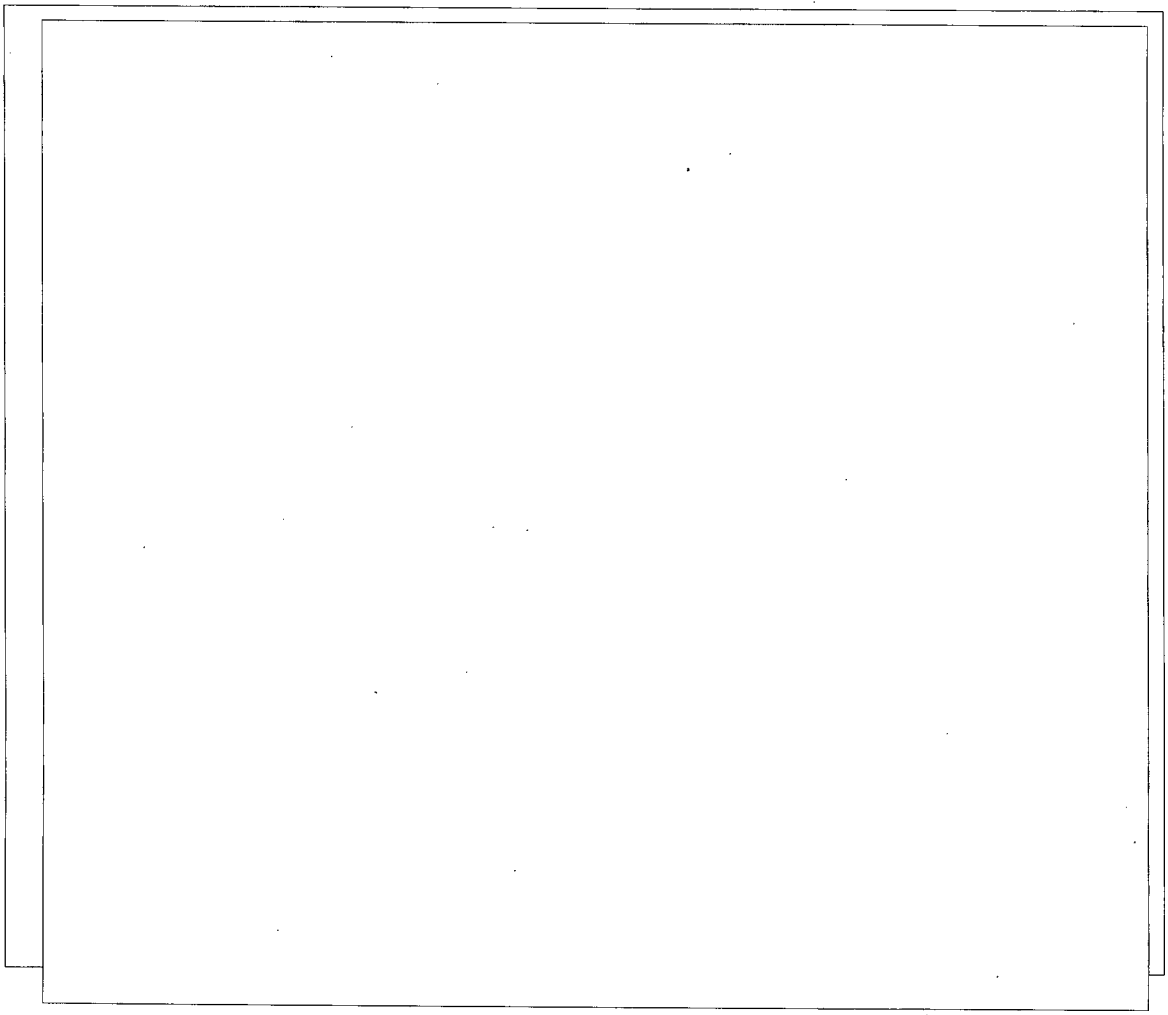
Soviet naval infantry strength is estimated at about 9,000 men which are deployed in each of the four major fleet areas. Possibly about 1,000 men are attached to the Northern Fleet. This

September 1966. Probably about 3,000 men are attached to each of the Baltic Sea and Black Sea Fleets

The most significant employment of amphibious forces, one that almost certainly involved naval infantrymen, was the deployment of four and possibly six amphibious ships of the most modern Soviet types with the Soviet Mediterranean naval forces in the summer of 1967.

Later in July four amphibious ships, in company with a detachment of larger combatant ships, paid a visit to Port Said. This operation was the first of its kind outside Soviet local sea theaters. It is viewed as an extension of the main Soviet theme for the Mediterranean naval forces in that it provides experience in operation of naval surface forces at some distance from USSR bases and serves to enhance the power image that the USSR is attempting to build in the eastern Mediterranean.

There is no evidence of the development of any new classes of amphibious ships in the foreseeable future. However, the tenuous evidence of the use of helicopters suggests the possibility that the two new helicopter carriers could participate in amphibious operations. The reported use of merchant ships in support of amphibious exercises also suggests that the Soviets would commit part of the vast resources of the maritime fleet to sealift of troops and military cargo.



4. Naval Construction and Force Level

The construction program for the Soviet general purpose forces continues to be oriented toward the development of a fleet capable of operations at greater distances from the USSR. With respect to surface forces, there has been a modest increase in the construction rate of major combatants, while submarine programing is in a state of transition, with older programs being replaced by programs for submarines of newer design. Because of this transition the current rate of output probably will be somewhat below that of previous years.

a. Submarines

We believe that the USSR is embarked on a major new submarine construction program designed to bring about a significant increase in the capability of the Soviet submarine force.

There is firm evidence that the new classes of submarines represent an important technological advance over previous classes.

used in the past. We believe that the rate of production of nuclear-powered submarines will be increased over previous years, and that by about

Table 6

Estimated Soviet General Purpose Submarine Force
Mid-1967 - Mid-1969

	Mid-1967	Mid-1968	Mid-1969
Cruise Missile	53	57	59
Nuclear	29	31	31
E-I	5	5	5
E-II	24	26	26
Diesel	24	26	28
J	11	13	15
W Conversion	13	13	13
Attack	278	281	283
Nuclear	15	16	18
N	15	15	15
New	0	1	3
Diesel	263	265	265
F	48	50	50 a/
Z	20	20	20
R	15	15	15
W	165	165	165
Q	15	15	15
Total	331	338	342

a. Three of these are to be delivered to India.

b. Surface Forces*

There is no evidence of the start of construction of a new class of major surface combatant. The first unit of the Kresta class missile cruiser, which had been under construction in Leningrad since early 1964, became operational in February of this year. Production of the class at a rate of two ships per year probably will continue over the next few years. The production of Kashin class missile destroyers is continuing at Nikolayev. Because the Kashin program in Leningrad was phased out in favor of the Kresta class, we estimate the rate of output of Kashins at Nikolayev will increase to about two units per year and probably will continue over the next few years.

The first of two helicopter carriers under construction now is undergoing shakedown in the Black Sea. We believe this ship will be deployed to the Mediterranean in early 1968. The second unit will probably be completed in late 1968. The production program for helicopter carriers probably will include only two ships. The shipbuilding way utilized for this class has been diverted to construction of other ships.

Certain older ships are being converted to carry surface-to-air missiles. By early 1968 six of the Soviet Navy's 27 Kotlin class destroyers will carry twin-arm launchers on their sterns: at the current pace of work some eight to ten units will have been converted by mid-1969. At least two and probably four of these Kotlin DDG's are to be delivered to the United Arab Republic. Additional units may be supplied to other nations friendly to the USSR, but as yet there is no evidence of this.

* Estimates of the Soviet surface ship force for mid-1967 - mid-1969 are shown in Table 7.

Table 7

Estimated Soviet Surface Ship Force a/
Mid-1967 - Mid-1969

	Mid-1967	Mid-1968	Mid-1969
Helicopter Carriers	0	1	2
Missile Cruisers	6	8	10 to 11
Kresta Class GLGM	1	3	5 to 6
Kynda Class CLGM	4	4	4
Sverdlov Class CLG	1	1	1
Cruisers	17	17	17
Kirov OCA	3	3	3
Sverdlov CL	11	11	11
Chapayev CL	3	3	3
Missile Destroyers	25	30	36
Kashin DLG	11	12	14
Krupnyy DDGS	8	8	8
Kildin DDGS	4	4	4
Kotlin DDG	2	6	10 b/
Destroyers	77	73	69
Kotlin DD	25	21	17
Tallinn DD	1	1	1
Skoryy DD	51	51	51
Escorts	101	106	111
Riga DE	48	48	48
Kola DE	7	7	7
Mirka PCE	20	24	28
Petya PCE	26	27	28
Total	226	235	245 to 246

a. Includes a few ships in ready reserves.
b. Two and perhaps four of the ten estimated are to be delivered to the UAR.

Since 1963 construction of amphibious ships has been continuing. There now are about 30 units of the Polnocny class LSM in the Soviet navy. In mid-1966 a military transport ship, designated the Alligator class LST, appeared in the Baltic. This new ship is being produced at a rate of about two units per year. In addition, construction of the MP-SMB-1 class LCU has been going on since 1959 and more than 60 units have been produced. There are also about 100 older amphibious craft as well as some 400 minor landing craft in the current order-of-battle. The Soviets are also continuing to produce escorts, patrol craft (including guided missile units), mine craft, and naval auxiliaries.

The redesignation of Kresta and Kynda classes as missile cruisers has led to a substantially increased missile cruiser force over the last year and a corresponding decrease in the missile destroyer force. We estimate the current missile cruiser force at six units and the missile destroyer force at 25 units. The total number of launchers in this force includes 56 SSM launchers (36 for the SS-N-3 missile system) and 31 SAM launchers (30 for the SA-N-1 missile system). The conventionally armed general purpose force includes 17 cruisers, 77 destroyers, and 101 escorts.

By mid-1969 we estimate the current force will remain active and the force level will have been increased by the addition of two helicopter carriers, four to five missile cruisers, about three new missile destroyers, and about ten escorts. By this time about eight to ten Kotlin-class destroyers will have been modified for SAM launchers.

5. Sealift

The USSR's maritime fleet constitutes a large reserve of ships available for sealift operations as needed. Although this fleet is oriented to economic objectives, relatively large allocations of resources have been used in an

aggressive construction and acquisition program that has provided the USSR with a large, modern fleet of some 9 million deadweight tons (the US active fleet is about 16 million tons). However, the USSR does not have the ships that can provide heavy, logistic amphibious support or provide the necessary defenses for these ships where large numbers of maritime ships might be used under combat conditions.

6. Developments in the Naval Forces of the USSR's Eastern European Allies

Capabilities of the Eastern European navies are slowly continuing to improve through construction programs in Poland and East Germany and through transfers of Soviet equipment. The principal strength of these forces is in the Baltic units, primarily missile patrol boats and torpedo boats. Coordinated exercises continue to underline these forces' offshore defense role in combination with Soviet forces, although there has been some increase in independent operations.

Naval forces in the Eastern European countries are oriented primarily for augmentation with the Soviet Baltic and Black Sea Fleets. Their role appears to be that of offshore defense with some emphasis on minesweeping capability,

The Polish and East German navies comprise a larger and more powerful force than those of Bulgaria and Rumania in the Black Sea. Although there are 10 old submarines of medium and short range and nine old destroyer and escort types in these naval forces, probably the most important units are the 18 Osa-class guided missile patrol boats and 84 torpedo boats located in the Baltic (see Table 8).

Most of the ships in the naval forces of the Eastern European countries have been acquired from the USSR. There is, however, some domestic naval production activity under way in East Germany and Poland. East Germany has a continuing but

Table 8

Eastern European Naval Forces
as of Mid-1967

	East Germany	Poland	Total	Bulgaria	Rumania	Total
Submarines						
W class		4	4	2		2
M-V Class		3	3			
Orzel Class		1	1			
Major Surface						
Destroyers		3	3			
Escorts	4		4	2		2
Patrol Craft						
Osa	12	6	18		5	5
Large Subchasers	14	8	22	2	3	5
Subchasers	12		12	6		6
Torpedo Boats	60	24	84		13	13
Gunboats	58	3	61	8		8
Minesweepers						
Fleet	20	23	43	2	4	6
Medium	24		24	4	20	24
Landing Craft						
LSM	6	14	20		8	8
LCU	12		12	11		11

limited construction program for Hai class subchasers, and Iltis class torpedo boats. Poland is producing Krogulec class fleet minesweepers, the Polnochny class landing ships, Shershin class fast patrol boats, and auxiliary ships. A small part of the production of the Polnochny's has gone into the Polish fleet but most to the USSR.

7. Developments in the Soviet Naval Air Forces

a. Mission

The main missions of the Soviet Naval Air Forces (SNAF) are: (1) reconnaissance and strike operations against naval surface forces, and (2) antisubmarine warfare (ASW). Emphasis has been given to developing capabilities to counter the threat of US carrier attack forces, and efforts in the ASW field have been relatively limited. It is expected that the ASW role will receive greater attention in the future, but no major changes in SNAF missions are anticipated.

b. Production and Deployment

There have been only minor changes in the SNAF during the past year. Production of reconnaissance variants of the TU-95 Bear heavy bomber is estimated to continue at a low rate, and the BE-12 Mail amphibious ASW aircraft now is believed to be in full series production. The TU-22 Blinder supersonic-dash medium bomber/ASM carrier also continues in production, but most of these aircraft have been assigned to Long Range Aviation (LRA). Table 9 shows the approximate current strength of the SNAF and indicates the principal changes in the inventory since mid-1966.

Although there has been little change in the SNAF strength, it now is believed that the capabilities of the Badger B force of some 65 aircraft probably are substantially greater than previously estimated. The Kennel (AS-1) air-to-surface (ASM)

Table 9

Aircraft of Soviet Naval Air Forces a/
as of 1 July 1967

Aircraft Type	Approximate Current Strength	Changes in Past Year
TU-95 Bear D	30	Increase of about ten aircraft
TU-16 Badger A	185	About 15 to 20 aircraft transferred from LRA
TU-16 Badger B	65	No change
TU-16 Badger C	200	No change
TU-22 Blinder A/B	50	Increase of about five aircraft
IL-28 Beagle	60	Decrease of about 30 aircraft
BE-6 Madge	55	Decrease of about five aircraft
BE-10 Mallow		Withdrawn from service
BE-12 Mail	15	Increase of about ten aircraft
Heavy Helicopter	10	Increase of about two aircraft
Light Helicopter	140	Increase of about ten aircraft, possibly new models

a. Data represent the best estimates of the ranges shown in Table 10.

originally deployed with this aircraft has serious operational drawbacks, including its relatively short range (55 nm), limitations on launch speed and altitude. We now believe that most or all of the SNAF Badger B aircraft probably have been re-equipped with an improved missile, the AS-5. The AS-5 is similar in general appearance to the AS-1 and is estimated to have a maximum range of at least 100 nm and a low-level/high-speed flight profile. The new missile, which may have been delivered to SNAF units as early as 1963, substantially increases the strike capability of the medium bomber forces. The old Badger B/AS-1 system is decidedly inferior to the later Badger C/Kipper (AS-2) system, but the Badger B/AS-5 is at least as great a threat as the Badger C/AS-2. Although the AS-5 is somewhat slower than the AS-2 (about Mach 1.0 and Mach 1.3, respectively), the range of both missiles is comparable, and the Badger B carries two AS-5 missiles whereas only one AS-2 can be carried by a Badger C.

c. Developmental Trends*

The deployment of the TU-95 Bear reconnaissance system has proceeded about as expected, with approximately 30 aircraft in service by mid-1967. The SNAF has two Bear units, one in the Northern Fleet area and one in the Pacific, and the deployment suggests that each unit will operate some 15 to 20 aircraft. The deployment of this system probably will be completed within the next year, with about 35 or 40 aircraft in service. This will provide the SNAF with a good long-range reconnaissance capability in both the Pacific and Atlantic theaters, and it is expected that this Bear force will continue in service through the mid-1970's.

The SNAF medium bomber forces have grown slowly during the past several years, primarily as the result of transfers of Badger bomber/tanker

* Estimates of the Soviet naval air force for mid-1967 - mid-1969 are shown in Table 10.

Table 10

Estimated Strength of the Soviet Naval Air Force
1 July 1967 - Mid-1969

Aircraft Type	1 July 1967	Mid-1968	Mid-1969
TU-95 Bear D	25 to 30	30 to 40	30 to 45
TU-16 Badger A	180 to 200	180 to 200	170 to 190
TU-16 Badger B	60 to 70	60 to 70	60 to 70
TU-16 Badger C	190 to 215	190 to 215	200 to 170
TU-22 Blinder A/B a/	50 to 55	50 to 75	50 to 100
IL-28 Beagle	50 to 75	25 to 50	0 to 25
BE-6 Madge	60 to 45	50 to 40	40 to 20
New ASW	10 to 20	20 to 40	30 to 60
Heavy Helicopter	5 to 15	10 to 20	10 to 20
Light Helicopter	125 to 150	125 to 150	125 to 150

a. In 1968 and 1969 about one-half of the total Blinder force may be equipped with ASM's. The missile could also have been available for about one-half the force by mid-1967, but this is considered less likely.

aircraft from LRA. For the most part, these aircraft have been distributed among the existing SNAF units. The Badger C ASM carrier force of about 200 aircraft is believed to have remained unchanged, and there has been no confirmed change in the strength of the Badger B ASM carrier force of about 65 aircraft. There has been some evidence that one of the Badger bomber/reconnaissance units may be involved in conversion to the AS-5 system. The conversion of this unit to the B variant would increase the Badger B force by some 20 aircraft. It is believed to be more likely, however, that this unit will retain its bomber/reconnaissance role. As before, about 15 Badger aircraft are being used in the ASW role, but there is no evidence of increased activity in the area.

Little change is expected in the SNAF Badger force during the next two years. The Badger has been out of production since early 1959, however, and it is expected that the SNAF Badger force will decline considerably during the 1970's. The rate of decline will depend to a large extent on the rate of deployment of new generation aircraft (see below), but in any case it is believed that the Badger force will be down to some 200 aircraft or less by the mid-1970's.

One of the two SNAF TU-22 Blinder units received about five aircraft during the past year - the first addition to the SNAF Blinder force since 1964. These deliveries brought this unit up to a normal regimental strength of about 25 aircraft, and there has been no evidence of the involvement of other SNAF units in the Blinder program. Kazan' Airframe Plant 22, the Blinder factory, began series production of the IL-62 Classic heavy transport during 1966, and it is believed that the Blinder will be phased out of production by early 1968. It would be possible for both aircraft to continue in production, but this would be contrary to Soviet practice. As the SNAF has displayed little interest in the Blinder program for the past few years, it seems unlikely that additional units will be re-equipped with this aircraft.

Recent information, however, indicates that the Kitchen (AS-4) ASM for Blinder may be available for service, and there is earlier evidence of the probable development of an antiship version of this missile. In addition, KEYHOLE photography reveals that some of the SNAF Blinders may have the large nose radoms associated with the Blinder B ASM carrier. It is possible, therefore, that the SNAF will resume deployment of the Blinder. Considering the probability that production will end in 1968, we believe that not more than one or two additional SNAF Blinder regiments would be formed in any case, and it is at least an equal possibility that there will be no further deployment. In projecting Blinder strength, therefore, a peak deployment of 50 to 100 aircrart has been used to reflect the two alternatives. In either case, it is believed that a portion of these aircraft probably will be equipped with ASM's - perhaps 25 ASM carriers for the low side of the projection and as many as 75 for the high side.

The deployment of more than 100 Blinders with the SNAF is considered unlikely, and by the mid-1970's these aircraft would begin to phase out of the inventory (the Blinder has been operational in the SNAF since 1963). The Badger force also is expected to have been considerably reduced by this period, and it is believed that there is a better than even chance that a new medium bomber/ASM carrier will be introduced by the mid-1970's. The introduction of a new aircraft in the 1973-74 period, for example, would enable the SNAF to maintain a medium bomber/ASM carrier force of some 300 to 350 aircraft. Such a force might contain a total of some 100-180 Blinder and new medium aircraft, with the new medium aircraft forming at least half of the total.

The IL-28 Beagle light bomber force continues to decline, and there is no indication that these aircraft will be replaced by a more modern type (the logical candidate, the YAK-28 Brewer, has been phased out of production). It is believed that the Beagle light bomber units will be completely deactivated within the next year or two, although a handful of aircraft may continue in service for general utility use.

deployment of the BE-12 Mail twin-turboprop amphibian has begun, and it is believed that this aircraft will continue in production for several years as a replacement for the BE-6 Madge piston-engine flying boat. The BE-10 Mallow twin-jet flying boat - which was deployed in limited numbers and probably never became fully operational - is believed to have been withdrawn from service during the past year. The May ASW variant of the IL-18 Coot four turboprop transport is known to have continued under development, but there has been no evidence that any of these May aircraft have entered service. This advanced ASW aircraft possibly will enter service in the next year or so, but it is considered unlikely that either the May or the Mail will be extensively deployed. A mixed force of some 100 new ASW aircraft could be available by the early 1970's and maintained throughout the period of this projection.

The SNAF helicopter forces have grown slightly during the past year, and there is increasing evidence that new models may be entering service. To date, however, there has been no firm identification of new model helicopters in the SNAF inventory.

The MI-8 Hip and KA-20 Harp twin-turbine helicopters, among others, are considered to be candidates for deployment with the SNAF. The Hip, which is in series production for both civil and military use, could be used to replace the MI-4 Hound helicopters presently used as transports, and might also be adapted for the ASW role. The Harp is a specialized ASW helicopter first seen in 1961, and recent evidence indicates continuing development of this aircraft. Other helicopters under development, such as the KA-26 Hoodlum, also could be useful to the SNAF, but there is no indication of which of the several types will be selected for deployment. No change in the total strength of the SNAF helicopter forces is projected for the 1970's, but the introduction of improved models is expected substantially to increase the capabilities of these forces.

In addition to the relatively large force of light and medium helicopters, the SNAF also operates about ten MI-6 Hook heavy helicopters. It is considered unlikely that there will be a major expansion of this force, which is believed to be used for logistic support, although another five or ten aircraft of this type might be deployed.

III. Extended Military Capabilities

The interest of the Soviet leadership in competing with the United States for influence around the world has been hobbled by the lack of a mobile military capability sufficient to exert direct pressure with conventional forces beyond the areas adjacent to Soviet borders. During the past several years it has become apparent that measures are under way to meet this problem by expanding the role of the navy and by acquiring a long-range airlift capability.

Since 1964, Soviet naval forces - both surface combatants and submarines - in the Mediterranean have been increasing. The build-up is designed to improve the Soviet capability for operations on a continuing basis outside local sea theaters and to create the image of naval power as support to friendly countries bordering on or near the Mediterranean.

The mid-1967 deployment in the Mediterranean showed an increase in surface combatants of about 40 percent and an increase in submarines of some 120 percent over 1966. Deployment this year reached an all-time high in July when about 17 surface combatants and 13 submarines were deployed, including the first significant deployment of nuclear submarines - two N class and one E class. Also included for the first time in 1967 were amphibious units. The Mediterranean force is supported by first-line submarine tenders, intelligence collectors, hydrographic ships, tugs and rescue ships, oilers, and other miscellaneous support ships. Because of restrictions on the movement of Soviet submarines through the Turkish Straits by the terms of the Montreux Convention,

the submarines in the Mediterranean have been deployed from the Northern and Baltic Fleets, while the surface combatant and support ships have come largely from the Black Sea.

There is, as yet, no indication that the Soviets look upon their Mediterranean fleet as one competent to engage the Western naval forces, nor is there any indication that the USSR intends to develop operating bases in the area. During the past few years a number of state visits and port calls have been made to various countries in the Mediterranean, but these probably were undertaken as opportunities to demonstrate Soviet naval national power with the hope of gaining political influence rather than bases.

The Soviets may expect to be able to use Yugoslav ports for maintaining units in the Mediterranean. In late 1967, two submarines and an escort paid a visit to a Yugoslav port reportedly for repairs to one of the submarines. The submarine repaired was one of two units that had left the Black Sea in early May and were permitted to pass through the Bosporus, under the terms of the Montreux Convention, because they were to be repaired in the Baltic Sea.

We believe that the USSR will maintain a naval force in the Mediterranean for the foreseeable future. The composition of the force will probably vary from year to year, but we expect it will include both surface combatants and submarines. In time, we anticipate the Soviets will begin to carry out operations with this fleet.

Soviet ships have monitored the movement of US Sixth Fleet ships and fleet exercises and have at times harassed Sixth Fleet ships. The composition of this Mediterranean force has included at one time or another every major type of surface ship in the Soviet Fleet, with the exception of the recently completed Kresta-class CLG, and every major type of submarine with the exception of ballistic-missile types.

In addition to their growing naval presence the Soviets have introduced a new large, long-range air transport, the AN-22 Cock, which will provide them for the first time with a practical capability for the intercontinental air delivery of military equipment or units. As an example, the 15 AN-22's projected to be available to the Soviets by late 1969 could move the equipment of an airborne parachute regiment from the USSR to the Congo in about two days, using each aircraft for three round trips.* Movement of the personnel would be simpler and could be accomplished with existing transports. Supply of expendables in a combat situation might require an additional 35 flights per week.

It is expected that the Soviet naval presence in Free World areas will grow for the next few years. The impact of this presence will be broadened as the Soviets introduce their long-range transport capability, and the potential support they can offer to distant nations will be enlarged.

IV. Developments in the Sino-Soviet Border Areas

A. General Developments

The gradual Soviet build-up in the frontier regions facing China, in progress since the early 1960's, has been somewhat accelerated during the past year or so, and has now been extended to the Mongolian Peoples Republic where we believe the Soviets have stationed units equivalent to about one division and some support. The cumulative effect of these actions so far amounts to an increase of four or five divisions and one tactical aviation regiment and a general improvement in the strength, equipment status, and combat readiness of all the military forces in the area. With these improvements, the Soviets have further ensured the security of their own territory and, at the same time, have provided

* Equipment tonnage for a standard Soviet motorized rifle regiment is about six times this requirement.

themselves with the military means to deal with a greater range of problems and opportunities which might develop out of the increasing chaos in China.

We expect that the Soviet build-up along the China border will continue at something like the present deliberate rate. Its gradual pace and modest size thus far suggest that the Soviet force goals are probably quite limited and are not likely to lead to a large-scale offensive capability. Rather, we expect the Soviets might aim for a total force of 20 or so divisions (including two to four in Mongolia) with a relatively high level of combat readiness. A force on that order should provide the USSR with a more than adequate defensive capability and, at the same time, would make a formidable instrument for reinforcing policy or conducting limited military intervention.

Viewed in the context of the Sino-Soviet rift and the increasing internal strife in China, the future presents the USSR with great uncertainties. These include not only dangers, but also opportunities which are probably as yet ill defined and largely speculative. The Soviets probably view the dangers as ranging from sabotage and subversion, through the kinds of border incidents which have already occurred, up to limited but sizable military actions, instigated by the Chinese or arising through escalation of some future incident. They also appear to be concerned about the vulnerability and potential instability of their Mongolian satellite. The opportunities range from the encouragement of political unrest and dissension in Chinese frontier regions up to outright military intervention inside Chinese territory for the purpose of establishing puppet regimes susceptible to Soviet influence.

B. Balance of Forces

1. Soviet

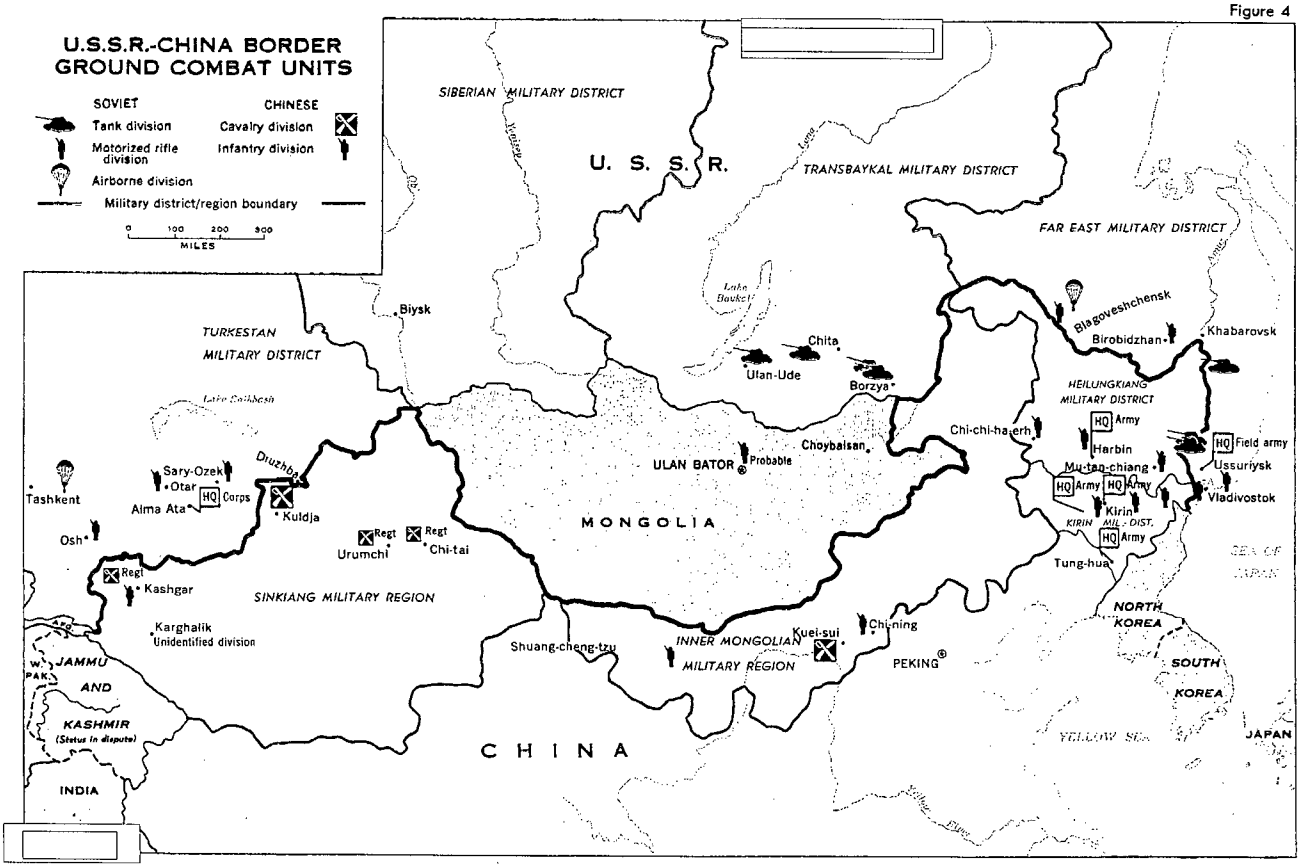
Despite the improvements we have noted, Soviet theater forces near the China frontier region remain defensive in scale. For example, only about

13 Soviet divisions, comprising perhaps 100,000 men, are deployed near Manchuria while the total Chinese force in northern Manchuria and Inner Mongolia numbers about 125,000 (see map). Thus a relatively small mobile force with heavy firepower concentrated near the border on the Soviet side should be viewed in contrast with a larger, but far less mobile and less well armed, force on the Chinese side - much of it concentrated well away from the border area. Under the circumstances neither side has a clear offensive advantage but each side is well disposed for defense.

The Soviet build-up began as early as 1960 when an airborne division was moved into the Turkestan Military District (MD) near western Sinkiang. In November 1963 a motorized rifle regiment moved from western Turkestan to Druzhba, which blocks the Dzungarian Gate. Since December 1965 the build-up opposite Sinkiang has quickened with the movement to the Alma Ata area of an army corps headquarters from Dushanbe and elements of two motorized rifle divisions, one from the North Caucasus MD and the other from the Baltic MD. a motorized rifle division at Osh may also be subordinate to this corps. Also, the Druzhba regiment now is the presence of at least one of the divisions, in the area and possibly both. Thus, the total opposite Sinkiang has grown since 1960 from a single division to a force of three or four divisions.

In the Transbaykal MD, a substantial increase has taken place in the equipment levels and training activities of the four divisions located there. A considerable amount of new construction is apparent, particularly in the Borzya area where the two most active divisions are located. Also, the Soviets recently established a tactical aviation unit with about 48 MIG-17 Fresco aircraft in the Transbaykal MD.

Figure 4


U.S.S.R.-CHINA BORDER GROUND COMBAT UNITS
SOVIET
Tank division
Motorized rifle division
Airborne division
CHINESE
Cavalry division
Infantry division
Military district/region boundary
0 100 200 300
MILES
SIBERIAN MILITARY DISTRICT
U. S. S. R.
TRANSBAYKAL MILITARY DISTRICT
FAR EAST MILITARY DISTRICT
TURKESTAN MILITARY DISTRICT
HEILUNGKIANG MILITARY DISTRICT
SINKIANG MILITARY REGION
INNER MONGOLIAN MILITARY REGION
MONGOLIA
CHINA
ULAN BATOR
Probable
Choybalsan
Ulan-Ude
Chita
Borzya
Biysk
Blagoveshchensk
Birobidzhan
Khabarovsk
Chi-chi-ha-erh
Harbin
Mu-tan-chiang
Kirin
Ussuriysk
Vladivostok
Tung-hua
Tashkent
Sary-Ozek
Otar
Alma Ata
Corps
Druzhba
Kuldja
Osh
Urumchi
Regt
Chi-tai
Kashgar
Karghalik
Unidentified division
Shuang-cheng-tzu
Kuei-sui
Chi-ning
PEKING
NORTH KOREA
SOUTH KOREA
JAPAN
YELLOW SEA
JAMMU AND KASHMIR
(Status in dispute)
INDIA
W. PAK

Sufficient evidence is available to indicate that the Soviets are stationing ground force units in the Ulan Bator area of Mongolia. Soviet military construction units are constructing a large military camp near Ulan Bator capable of holding about 5,000 men and are also improving an airfield.

Another camp possibly of regimental size is also being built near Ulan Bator and Soviet-type equipment is observed here. Similar construction activity and equipment parks exist in the Choybalsan area, but their identification as Soviet is not certain.

In the Far East MD a motorized rifle division from the Moscow MD was moved to the Birobidzhan area in mid-1964. Moreover, recent photography of ground force installations along the border shows some new construction and increased activity, suggesting these units have been increased in strength.

2. China

China has deployed two armies, the 23rd and the 46th, since the late 1950's along the Soviet border in northern and eastern Manchuria. The 46th Army headquarters in Kirin has elements close to the border in the Vladivostok area. Divisions of the 23rd are deployed along the northeastern Manchurian border. The total number of ground force troops deployed along the eastern sector of the Sino-Soviet border is about 85,000. Two more armies, comprising an additional 85,000 men, are located in east-central Manchuria. In the west, along the Sinkiang-USSR boundary, the Chinese have some 40,000 troops including an independent infantry division, the equivalent of two cavalry divisions, four border defense regiments, and three motor transport regiments.

Chinese military dispositions relating to increased tensions apparently have been quite restrained. In fact, increases in Chinese border defense troops (guards) along the entire length of the long boundary with the USSR have probably totaled less than 10,000 troops. In addition, there has been no significant increase in regular People's Liberation Army (PLA) ground force troops stationed in areas adjacent to the border.

[redacted]